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Preliminary Results from Relationship Between Teachers' Vocabulary Usage and the Vocabulary of Kindergarten and First Grade Students.

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To examine the relationship between the vocabulary teachers use in the classroom and the percentage of that vocabulary understood by the students, 16 volunteer teachers were tape recorded for an hour and a half during a normal day's activities. Half the teachers were from lower or lower middle class families; the other half were from middle and upper class families. From the tapes a word list was compiled for the first grade teachers and another for the kindergarten teachers. Vocabulary tests of 50 words each were then derived from the word lists and given to the children. A maximum effort was made to draw out the knowledge of word meanings. Analysis of the data indicated that the percentage of words used by the teachers and known by the students was generally quite high indicating that teachers might use more difficult words to build vocabulary. Social class, race, and grade breakdowns sometimes resulted in samples too small to be significant, and trends were not always substantial but the percentage of teachers' words known to youngsters seems to vary with social class, race, and grade. The effect of the experimental situation on the teachers' vocabularies was not calculated. (MH)

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PRELIMINARY RESULTS

FROM

RELATIONSHIP BETWEEN TEACHERS' VOCABULARY USAGE AND THE VOCABULARY OF KINDERGARTEN AND FIRST GRADE STUDENTS

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Preliminary Results

Relationship Between Teachers' Vocabulary Usage and The Vocabulary of Kindergarten and First Grade Students

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Regardless of advances made in the technology of information transmission in the classroom, one of the principal roles of the teacher will almost certainly involve talking with children. Although educators have long felt that they were able to communicate effectively with children in the lower grades, it is not clear that such is really the case. There has been some research related to children's language usage including such variables as linguistic structure (Loban, 1963; Strickland, 1962), effects of nursery school training (Sears and Dowley, 1963), and children's vocabulary knowledge (Dale, 1965). There has not, however, been an attempt to relate the children's knowledge of vocabulary to the teachers' use of vocabulary. The purpose of this study was to examine the relationship between the vocabulary used by teachers and the proportion of that vocabulary known by the children in their classrooms.

Method and Procedures. Eight kindergarten and eight first grade teachers participated in the study. The teachers from seven schools in Alachua County (North Central Florida) were asked to participate and the teachers used in the study were all volunteers from these schools. An attempt was made to balance the sample on the basis of socio-economic background and race. Inasmuch as it was necessary to use only volunteers, the balance was not completely maintained. The final sample included three Negro teachers, two kindergarten and

one first grade,and 13 white teachers, six kindergarten and seven first grade. A much closer balance was maintained for socio-economic background. About half the teachers came from families which could be reasonably categorized as "lower or lower middle" class and half from "middle and upper" class. All determinations of social class were made according to Duncan's method (Duncan, 1961).

Tape recordings were made during the normal school day. Each teacher was recorded for about one and one-half hours, sampled randomly from the day's activity. On a prearranged day, the investigator arrived at the school prior to the beginning of the class session and gave the teacher a wireless microphone which she then attached to her clothing. The investigator left the room and did not return until the recording session was completed. The recording apparatus and receiver for the microphone were operated outside the classroom. All of the tape recordings were thus made as unobtrusively as possible. It seemed apparent as we observed the classroom activity that the teachers adapted very quickly to the presence of the microphone, and it is doubtful that their classroom behavior was appreciably altered by the presence of the apparatus.

The tape recordings were then transcribed and carefully checked so that the transcripts reflected as nearly as possible what was said in the classroom during the sampled periods. A word list was then made for each teacher. Following this, two lists were made by combining all of the words used by the kindergarten teachers into one list and all of the words used by the first grade teachers into another.

Vocabulary tests were then built from the combined word lists. Since we were interested in the proportion of words known by the children rather than proportions known by a child, ten lists were made by sampling randomly from the combined list. Estimates could then be made of the total number of words used by teachers which were known by children. In addition, estimates could be made of the proportion of words used by a specific teacher which the children in her

classroom knew. Each list consisted of fifty words so that a child could be tested in a half hour. The tests were administered individually and the child was simply asked if he knew what a word meant. If the child responded "yes," he was then asked what the word meant. The child was given credit for knowing the word if he could supply a meaningful referrent or use the word in a meaningful way. Some examples may help to clarify the criteria: "head"--if the child pointed to his head, we scored the word as known; "tag"--if the child pointed to a tag or said "it looks like a label," we scored the word as known; "wish"--"I wish I had a new dress;" "tie"--"like I can't tie my shoe;" "most"--"like the most money would be rich;" "when"--"when will you come back?" Since the purpose of the testing was to classify words as either known or unknown, every effort was made to get a maximum response from every child. That is, if a youngster knew a word, we wanted to be sure that he let us know that he did. Six children from each classroom were tested, making a total of ninety-six (96) children in the total sample.

Results and Discussion. The total number of words used and the number of different words used by our sixteen teachers are shown in Table 1. We computed what might be generously thought of as a "difficulty ratio," which is number of different words divided by total number of words for each teacher. The difficulty ratios are also presented in Table 1. It is obvious that there is a great deal of variability in both the total output of the teachers and also in the number of different words used during the sampled period.

The results of the children's testing are shown in Table 2. We have made a breakdown according to sex, class, race, and grade. There are some empty cells in the table which came about simply because we were unable to find children who fit into the categories. In the schools we sampled were no middle-class Negro boys with middle-class teachers and no middle-class white boys with lower-

Table 1.

Total number of words and number of different words used by kindergarten and first grade teachers for a randomly selected forty-five minute period.

Kindergarten

Teacher's Social-Class	Race	Total Output	Number of Different Words	Ratio*
1. lower	N	2,608	355	.1361
2. lower	N	3,023	488	.1614
3. lower	W	4,223	487	.1153
4. lower	W	1,964	383	.1950
5. middle	W	3,281	556	.1695
6. middle	W	5,365	636	.1185
7. middle	W	2,975	408	.1371
8. middle	W	3,023	556	.1839
All Combined		26,587	1,379	

First Grade

Teacher's Social-Class	Race	Total Output	Number of Different Words	Ratio*
9. lower	N	4,831	469	.0971
10. lower	W	2,942	410	.1394
11. lower	W	5,382	412	.0766
12. middle	W	4,395	455	.1035
13. middle	W	4,400	456	.1036
14. middle	W	3,990	454	.1138
15. middle	W	4,420	432	.0977
16. middle	W	2,780	413	.1486
All Combined		33,374	1,131	

*See Text

Table 2.

Proportion of words used by kindergarten and first grade teachers which were known by children in their classrooms.

Kindergarten Teacher

			Low	Middle
BOY	Middle	Negro	62%	---
		White	---	81%
	Low	Negro	64%	84%
		White	57%	55%
GIRL	Middle	Negro	---	78%
		White	---	83%
	Low	Negro	69%	71%
		White	55%	86%

First Grade Teacher

			Low	Middle
BOY	Middle	Negro	93%	81%
		White	81%	83%
	Low	Negro	96%	79%
		White	---	71%
GIRL	Middle	Negro	95%	62%
		White	85%	90%
	Low	Negro	80%	60%
		White	---	77%

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class teachers at the kindergarten level. This is not to say that such categories do not exist but only that we were unable to find them in the schools sampled. There were no middle-class girls with lower-class teachers at the kindergarten level. At the first grade level there were no lower-class white children with lower-class teachers. Again, such categories of children certainly exist, but our sampling missed them. In addition, some of the cells include very small samples and some include only one child. What this means, of course, is that some of the figures presented here are likely to be quite unstable. The percentages shown in Table 2 are based on the words used by individual teachers and the number of those words known by the children from the individual's class. Thus--these percentages do not represent the words uttered by all teachers which are known by all youngsters.

It may be noted from an examination of Table 2 that the percentages of words known by youngsters that were used by their teachers are generally quite high. This is certainly some indication that the youngsters do, indeed, understand the words that their teachers are using. It may also mean that the youngsters could understand more difficult words or more variety in the words than their teachers are using.

Although the trend is not substantial enough to ensure positive conclusions, it seems apparent that the congruence between kindergarten teachers' vocabulary usage and the word knowledge of their pupils varies as a function of social class. The number of children tested in these categorizations of teachers is large enough that the proportions of words known are probably relatively stable. The indication seems to be that the lower-class teachers use more words that their pupils do not know than do the middle-class teachers. In addition, there appears to be a very distinct difference between the kindergarten and first grade lower-class teachers. That is, the children in the kindergarten classes

appear to know a smaller percentage of the words used by their teachers than do the children in the first grade classes. This may mean that some teachers are more sensitive to the children's word knowledge than are others, or it may mean that some teachers make a point of using new words in such a way that the children learn the meaning of the words as they are introduced. This study cannot presently answer the question of exactly why it is that the proportions appear to be different, but the indication is clear enough at this point that further analysis seems warranted.

Racial differences among the children's knowledge of words their teachers use are not clear, but there seems to be an indication that the white youngsters know a higher percentage of the words used than do the Negro. It is, however, curious that the lower-class white kindergarten children used in this study tend to score lower than any of the other groups. Taken together, there are enough children to provide a reasonable suggestion that the phenomenon may be reliable. Further work will provide a more definitive answer.

Summary and Conclusion. Classroom verbalizations of sixteen kindergarten and first grade teachers were tape recorded at random intervals throughout a regular classroom session. Vocabulary lists were complied from the recordings and fifty (50) word vocabulary tests were made from the lists. Children were tested individually on their knowledge of words used by their teachers. The results indicate that although teachers do indeed use many words their pupils do not know, that in general the children know relatively high proportions of the words used by their teachers. The proportions of words used by the teachers which are known by their pupils appears to vary as a function of grade, social class, and race.

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